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EXAMINER

BIBRINS LATANVA

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

24737 7590 06/26/2008

PHILIPS INTELLECTUAL PROPERTY & STANDARDS

BRIARCLIFF MANOR, NY 10510

P.O. BOX 3001

PAPER NUMBER ARTHNIT 2622 DATE MAILED: 06/26/2008

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|------------------------|---------------------|------------------|
| 10/561,850 | 12/21/2005 | Erwin Rinaldo Meinders | NL030738 | 3213 |

TITLE OF INVENTION: METHOD AND APPARATUS FOR READING AND RECORDING INFORMATION ON A REWRITABLE RECORD CARRIER

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1440 | \$300 | \$0 | \$1740 | 09/26/2008 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

| INSTRUCTIONS: This appropriate. All further e indicated unless correcte maintenance fee notificat | form should be used I correspondence including d below or directed off ions. | or tran | smitting the ISSU Patent, advance or in Block 1, by (a | JE FEE and PUBLI rders and notification a) specifying a new | | | | | | |
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| | | | | Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. | | | | | | |
| | | | | DARDS | Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the States Postal Service with sufficient postage for first class mail in an eaddressed to the Mail Stop ISSUE FEE address above, or being fit transmitted to the USPTO (571) 273-2885, on the date indicated below | | | | Tinitad | |
| | | | | | | | | | (Deposito | r's name) |
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| "Fee Address" indi PTO/SB/47; Rev 03-0: Number is required. 3. ASSIGNEE NAME AT | ondence address (or Cha W122) attached. cation (or "Fee Address 2 or more recent) attach | Indicated. Use | Correspondence ation form e of a Customer | (I) the names of or agents OR, alte (2) the name of a registered attorne 2 registered pater listed, no name w THE PATENT (print | up to ernativ single y or a it attor ill be or typ | e firm (having as a gent) and the name neys or agents. If printed. | memb es of u no nam | era 2pto e is 3 | ocument has been i | |
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| ☐ Issue Fee | | | ad). | ☐ A check is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached. | | | | | | |
| ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies | | | | The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form). | | | | | ny form). | |
| 5. Change in Entity Stat | us (from status indicate s SMALL ENTITY state | | | ☐ b. Applicant is n | o long | er claiming SMAI | LEN | TTY status. Sec 37 CI | R 1.27(g)(2). | |
| NOTE: The Issue Fee and interest as shown by the r | d Publication Fee (if req ecords of the United Sta | uired) v ites Pat | will not be accepted and Trademark | d from anyone other Office. | than th | ne applicant; a regi | stered a | ittorney or agent; or th | e assignee or other | party in |
| Authorized Signature | | | | | | Date | | | | |
| Typed or printed name | | | | | | Registration N | | | | |
| This collection of informa an application. Confident submitting the completed this form and/or suggestic Box 1450, Alexandria, V Alexandria, Virginia 223 | ation is required by 37 C iality is governed by 35 I application form to the ons for reducing this bu irginia 22313-1450. DO 13-1450. | U.S.C. U.S.C. USPT rden, sl O NOT | 11. The informatic . 122 and 37 CFR O. Time will vary hould be sent to the SEND FEES OR | on is required to obtai 1.14. This collection depending upon the e Chief Information COMPLETED FORM | in or n is esti indiv Office AS TO | etain a benefit by the imated to take 12 r idual case. Any co r, U.S. Patent and THIS ADDRESS | ne publ ninutes mment Traden | ic which is to file (and to complete, includin s on the amount of tir ark Office, U.S. Depa D TO: Commissioner I | by the USPTO to g gathering, prepar ne you require to c attment of Commer or Patents, P.O. Bo | process) ing, and omplete ce, P.O. ox 1450, |

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



UNITED STATES PATENT AND TRADEMARK OFFICE

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| 24737 | 7590 06/26/2008 | | EXAMINER | | |
| PHILIPS INTEI | LECTUAL PROPER | BIBBINS, | LATANYA | | |
| P.O. BOX 3001 | | ART UNIT | PAPER NUMBER | | |
| BRIARCLIFF M. | ANOR, NY 10510 | 2627 | | | |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 321 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 321 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

| Application No. | Applicant(s) | 1 |
|-----------------|-----------------|---|
| 10/561,850 | MEINDERS ET AL. | |
| Examiner | Art Unit | 1 |
| LaTanya Ribbine | 2627 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to 28 March 2008.
- 2. The allowed claim(s) is/are 1-7, 9-16, and 18 (to be renumbered 1-16).
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a)

 All b)

 Some* c)

 None of the:
 - 1. A Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDOMMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2.
 Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413),
 Paper No./Mail Date .
- 7. Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. Other _____.

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Application/Control Number: 10/561,850

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DETAILED ACTION

 In the remarks filed on March 28, 2008, Applicant amended claims 1, 9, 10, and 18, cancelled claims 8 and 17, and submitted arguments for allowability of pending claims 1-7, 9-16, and 18.

Allowable Subject Matter

- 2. Claims 1-7, 9-16, and 18 (to be renumbered 1-16) are allowed.
- 3. The following is an examiner's statement of reasons for allowance:

Regarding claims 1-7, none of the references of record, alone or in combination, suggest or fairly teach the limitations of independent claim 1 in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to disclose a method of recording data in the form of marks and for erasing recorded marks in an information layer of a record carrier by irradiating the information layer by means of a pulsed radiation beam, a recorded mark being erased by a sequence of erase pulses, said information layer having a phase reversibly changeable between a crystalline phase and an amorphous phase, characterized in that at least one of the erase pulses in said sequence of erase pulses has an erase power level which is decreasing with time; and wherein the time dependency of the erase power level of the at least one erase pulse is dependent on properties of the record carrier and the erasing velocity.

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Regarding claim 9, none of the references of record, alone or in combination. suggest or fairly teach the limitations of independent claim 9 in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to disclose an optical recording device for recording data in the form of marks and for erasing recorded marks in an information layer of a record carrier by irradiating the information layer with a pulsed radiation beam, said information layer having a phase reversibly changeable between a crystalline phase and an amorphous phase, the device comprising a radiation source for providing the radiation beam and a control unit operative for controlling the power of the radiation beam and for providing a sequence of write pulses for recording the marks and a sequence of erase pulses for erasing recorded marks, characterized in that the control unit is operative for controlling the power of the radiation beam for erasing a recorded mark such that at least one of the erase pulses in said sequence of erase pulses has an erase power level which is decreasing with time; and wherein the time dependency of the erase power level of the at least one erase pulse is dependent on properties of the record carrier and the erasing velocity.

Regarding claims 10-16, none of the references of record, alone or in combination, suggest or fairly teach the limitations of independent claim 10 in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to disclose a method of reading data recorded in the form of marks and spaces in an information layer of a record carrier by irradiating the information layer by means of a sequence of read pulses of a pulsed radiation beam, said information layer having a

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phase reversibly changeable between a crystalline phase and an amorphous phase, characterized in that at least one of the read pulses in said sequence of read pulses has an read power level which is decreasing with time; and wherein the time dependency of the read power level of the at least one read pulse is dependent on properties of the record carrier and the reading velocity.

Regarding claim 18, none of the references of record, alone or in combination, suggest or fairly teach the limitations of independent claim 18 in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to disclose an optical recording device for reading data recorded in the form of marks and spaces in an information layer of a record carrier by irradiating the information layer by means of a sequence of read pulses of a pulsed radiation beam, said information layer having a phase reversibly changeable between a crystalline phase and an amorphous phase, the device comprising a radiation source for providing the radiation beam and a control unit operative for controlling the power of the radiation beam and for providing a sequence of read pulses for reading the information, characterized in that the control unit is operative for controlling the power of the radiation beam for reading the information such that at least one of the read pulses in said sequence of read pulses has a read power level which is decreasing with time and wherein the time dependency of the read power level of the at least one read pulse is dependent on properties of the record carrier and the reading velocity.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Citation of Relevant Prior Art

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ahn et al. (US Patent Number 7,274,647 B2) disclose a method of and apparatus for recording data on an optical recording medium form a mark or a space by using a recording waveform having an erase pattern containing a multi-pulse. The method and the apparatus prevent distortion of the mark or the space and improve a mark shape such that a recording/reproducing characteristic of the optical recording medium is improved.

Ahn et al. (US PGPub Number 2006/0203676 A1) disclose a method and apparatus to record data on an optical recording medium include generating a recording waveform having an erase pattern comprising a multi-pulse having a high level which is higher than an erase power level and a low level which is lower than the erase power level. A power level of a leading one of the multi-pulse of the erase pattern and a power level between an end of the erase pattern and a start point of a leading pulse of a recording pattern are controlled to be the low level and the high level, respectively, the high level and the high level, respectively, or the low level and the low level, respectively.

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Harvey et al. (US PGPub Number 203/0107967) disclose a system and method are disclosed for generating a transition in a laser control signal at a precise point in time. A write strategy processor is configured to input a sequence of data and to determine a transition in a laser control signal from the sequence of data. The transition is specified by a number of pulse clock units and a delay. A write pulse generator is configured to input the number of pulse clock units and the delay and to generate a transition by creating a signal having a transition at the time specified by the number of pulse clock units and delaying the transition by the specified delay.

Lee et al. (US PGPub Number 2006/0193227 A1) disclose an optical recording medium allowing data to be recorded on, erased from, and reproduced from, and storing information about power levels of an erase pulse. The recorded erase pattern information may include information about power levels of first and last pulses of an erase pattern for erasing data. The first and last pulses of the erase pattern can be differently set depending on the differing kind of recording layer or layers of a disk or differing kinds of disks and recorded in a reproducible only area or rewritable area of the optical recording medium. Thus, by presetting the appropriate erase power levels, the time required for selecting an optimal erase power for the optical recording medium can be considerably reduced.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaTanya Bibbins whose telephone number is (571)270-

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1125. The examiner can normally be reached on Monday through Friday 7:30 am -

5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Wayne Young can be reached on 571 272-7582. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LaTanya Bibbins/ Examiner, Art Unit 2627

/Wayne Young/

Supervisory Patent Examiner, Art Unit 2627